

CLAIMS

Surge

1. An electrical connector for use in a power module, comprising:
5 a first end portion for forming an electrical connection with a substrate;
a second end portion;
a compliant portion situated between said first end portion and said second end portion, wherein said compliant portion comprises a compressed position and a decompressed position; and
wherein said first end portion is configured for forming an electrical connection with a substrate if said compliant portion is in said compressed position.

10 2. The electrical connector of claim 1, wherein said first end portion extends outward from said second end portion.

15 3. The electrical connector of claim 1, wherein said first end portion extends inward to said second end portion.

4. The electrical connector of claim 1, wherein said compliant portion is curved.

5. The electrical connector of claim 1, wherein said compliant portion is curved outward from said second end portion

20 6. The electrical connector of claim 1, wherein said compliant portion is curved inward to said second end portion.

7. The electrical connector of claim 1, further comprising a means for compressing said compliant portion from said uncompressed position to said compressed position.

25 8. The electrical connector of claim 7, wherein said means for compressing is downward pressure applied to said compliant portion.

9. The electrical connector of claim 7, wherein said means for compressing is a component placed on said second end portion for exerting downward pressure to said compliant portion.

10. The electrical connector of claim 7, wherein said means for compressing is a fastener.

11. The electrical connector of claim 10, wherein said fastener is a bolt.

12. A DC Bus for use in a power module, comprising:

5 a positive DC conductor bus plate;
a negative DC conductor bus plate placed parallel to said positive bus;
a connector fastenable from at least one of said positive bus or said negative bus to a substrate in a power module;
wherein said connector further comprises:

10 a first end portion for forming an electrical connection with a substrate;
a second end portion fastenable from at least one of said positive bus or said negative bus to a substrate in a power module;
a compliant portion situated between said first end portion and said second end portion, wherein said compliant portion comprises a compressed position and a decompressed position; and

15 wherein said first end portion is configured for forming an electrical connection with said substrate if said compliant portion is in said compressed position.

13. The DC Bus of claim 12, wherein said first end portion extends outward from said second end portion.

14. The DC Bus of claim 12, wherein said first end portion extends inward to said second end portion.

15. The DC Bus of claim 12, wherein said compliant portion is curved.

16. The DC Bus of claim 12, wherein said compliant portion is curved outward

20 from said second end portion

17. The DC Bus of claim 12, wherein said compliant portion is curved inward to said second end portion.

18. The DC Bus of claim 12, further comprising a means for compressing said compliant portion from said uncompressed position to said compressed position.

19. The DC Bus of claim 18, wherein said means for compressing is downward pressure applied to said compliant portion.
20. The DC Bus of claim 18, wherein said means for compressing is a component placed on said second end portion for exerting downward pressure to said compliant portion.
21. The DC Bus of claim 18, wherein said means for compressing is a fastener.
22. The DC Bus of claim 21, wherein said fastener is a bolt.

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